## **AMENDMENTS**

## IN THE CLAIMS

Atty Dkt. No.
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120052 as Please cancel claim 32 without prejudice, amend claims 30, 31 and 33, and add new cla follows:

(Amended) A method of manufacturing a micro-needle structure for penetrating the skin and other tissue barriers, said method comprising the steps of:

providing a suitable material from which said micro-needle structure can be fabricated by means of one or more at least one micro-replication techniques;

fabricating said micro-needle structure from said suitable material by means of one or more said at least one micro-replication techniques, wherein said micro-needle structure has comprises a proximal end defining a base having a center and a distal end having a vertex comprising a sharp tip, wherein said base has a diameter in the range from about 100 to 2,000 µm and the a line extending from the said center of the base to the said vertex defines a structural axis having a length in the range from about 100 to 10,000 µm; and

forming an open lumen within said micro-needle structure, said open lumen defining a lumenal axis and extending from said base to said distal end vertex, wherein the a distal end of said open lumen intersects said vertex and wherein said lumenal axis and said structural axis are not co-axial; and

customizing a tip at said vertex end, said customized tip being selectively angled for a particular application.

- 31. (Amended) The method according to of claim 30, wherein said open lumen is formed during the step of fabricating.
  - 32. (Cancelled)
- 33. (Amended) The method according to of claim 30 40 wherein said selectively angled tip comprises a beveled edge.

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40. (New) The method of claim 30 further comprising forming a selectively angled tip at said vertex.

- 41. (New) The method of claim 30 wherein said sutiable material is chosen from the group of a plastic and a resin.
- 42. (New) The method of claim 30 wherein said suitable material is chosen from the group of acrylic, polyacrylates, polycarbonate, epoxies, polyesters polyetheretherketone, polyvinylchloride, polyolefins and liquid crystalline polyesters.
- 43. (New) The method of claim 41 wherein said at least one micro-replication technique comprises injection molding.
  - 44. (New) The method of claim 30 wherein said suitable material comprises a metal.
- 45. (New) The method of claim 30 wherein the diameter of said open lumen is configured to exert a capillary force on a fluid present at said distal end of said open lumen.
  - 46. (New) A method of manufacturing a micro-needle structure, said method comprising: providing a plastic material;

fabricating said micro-needle structure by injection molding said plastic material, wherein said micro-needle structure comprises an oblique cone configuration having a base and a vertex comprising a sharp tip; and

forming an open lumen within said micro-needle structure, said open lumen extending from said base to said vertex wherein a distal end of said open lumen intersects said vertex.

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47. (New) The method of claim 46 wherein a line extending from a center of said base to said vertex defines a structural axis, wherein said open lumen defines a lumenal axis, and wherein said lumenal axis and said structural axis are not co-axial.

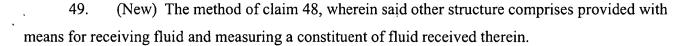
48. (New) A method of manufacturing a device comprising a micro-needle structure, said method comprising:

providing a suitable material from which said micro-needle structure can be fabricated by at least one micro-replication technique;

fabricating said micro-needle structure from said suitable material by said at least one micro-replication technique, wherein said micro-needle structure comprises an oblique cone configuration having a base and a vertex configured for penetrating the skin and other tissue barriers;

forming an open lumen within said micro-needle structure, said open lumen extending from said base to said vertex wherein a distal end of said open lumen intersects said vertex; and

integrating said micro-needle structure with another structure wherein said open lumen is in fluid communication with said other structure.



- 50. (New) The method of claim 48, wherein said other structure comprises a chamber for holding a fluid therein.
  - 51. (New) The method of claim 50, wherein said fluid is a therapeutic agent.
- 52. (New) The method of claim 48, further comprising fabricating a plurality of said microneedle structures and integrating said plurality with said other structure wherein said open lumen of each said microneedle structure is in fluid communication with said other structure.

